

WHAT IS CLAIMED IS:

1. A power supply device for a peripheral device, comprising:
 - a power input port connected to a computer;
 - an automatic switch assembly connected to the power input port;
 - 5 a power output port connected to the peripheral device and the automatic switch assembly respectively wherein the power output port is connected to the power input port in response to turning on the automatic switch assembly;
 - a charging circuit connected to the power input port;
 - 10 a rechargeable battery connected to the charging circuit; and
 - an output switch connected to the charging circuit, the power output port, and the automatic switch assembly respectively,

whereby connecting the power output port to the peripheral device will enable the automatic switch assembly to detect signal output from the peripheral device for controlling and enable the automatic switch assembly to be aware that the output switch is on, will supply the computer to the peripheral device via the power input port, the automatic switch assembly, and the power output port sequentially, will enable the rechargeable battery to supply additional power to the peripheral device as a compensation for inadequate power supplied by the computer, and will operate the peripheral device normally.

- 2. The power supply device of claim 1, wherein the automatic switch assembly comprises a switch connected to the power input port and the power output port respectively, and a control circuit connected to the switch, the power input port, and the output switch respectively so that responsive to 25 detecting signal output from the peripheral device by the control circuit, the control circuit is adapted to control the switch and is aware that the output switch is turned on, power of the computer is adapted to supply to the peripheral device via the power input port, the switch, and the power output port sequentially, the rechargeable battery is adapted to supply additional

power to the peripheral device as a compensation for the inadequate power supplied by the computer, and the peripheral device is adapted to operate normally.

3. The power supply device of claim 2, further comprising a battery voltage detector connected to the rechargeable battery, and a battery voltage low indicator connected to the battery voltage detector, wherein responsive to detecting an operating voltage of the rechargeable battery being too low by the battery voltage detector, the battery voltage detector lights up the battery voltage low indicator as warning that the battery voltage detector is unable to supply sufficient power.

4. The power supply device of claim 3, further comprising a battery protector disposed between the rechargeable battery and the charging circuit and between the rechargeable battery and the output switch, wherein the battery protector is connected to the rechargeable battery, the output switch, and the charging circuit respectively, and the battery protector is adapted to detect both an input current and an output current of the rechargeable battery so that in response to the input or the output current of the rechargeable battery being too large, the battery protector cuts off the circuit for disconnecting the rechargeable battery from the circuit as protection of the rechargeable battery for preventing the rechargeable battery from being damaged.

5. The power supply device of claim 4, further comprising a discharge voltage regulator disposed between the output switch and the battery protector, wherein the discharge voltage regulator is connected to the output switch and the battery protector respectively so that the discharge voltage regulator is adapted to regulate voltage of output power of the rechargeable battery when the rechargeable battery is supplying power to the peripheral device, and the voltage of the output power of the rechargeable battery is adapted to convert into one required for operating the peripheral device.

6. The power supply device of claim 5, further comprising a charging

controller connected to the charging circuit and the control circuit of the automatic switch assembly respectively, wherein the control circuit is adapted to control the charging controller which in turn is adapted to control charging of the rechargeable battery by the charging circuit.

- 5 7. The power supply device of claim 1, wherein the rechargeable battery is a lithium battery.